

# SURGING

紹 鑫 實 業



# SurgeArresters

陶瓷气体放电管

SGH8 Series

## Gas Discharge Tubes - SGH8 Series

## Features



- ◇ Provide ultra-fast response to surge voltage from slow-rising surge of 100V/s to rapid-rising surge of 10KV/μs.
- ◇ Stable breakdown voltage.
- ◇ High insulation resistance.
- ◇ Low capacitance (<2pF).
- ◇ High holdover voltage.
- ◇ Large absorbing transient current capability.

## Applications

- ◇ Repeaters, Modems.
- ◇ Telephone Interface, Line cards.
- ◇ Data communication equipment.
- ◇ Line test equipment.

## Part Number Code

# SGH8 0 - 230X SMDT

**Series:**

SX5系列:  $\phi$ 5.5\*6  
SGH8系列:  $\phi$ 8\*8

**Lead Type:**

0=SMD  
1=Thrust

**DC Line Voltage:**

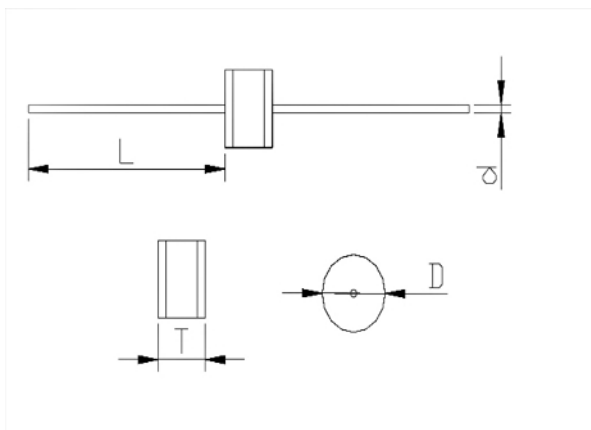
90X=90V  
230X=230V  
102X=1000V

**Package:**

SMD=Cylinder No Lead  
SMDT=2-SMD Cylinder Square End

## Gas Discharge Tubes - SGH8 Series

### PACKAGE DIMENSIONS



unit :mm

Items	Dimension	
	Spec.	Tolerance
D	8.0	±0.3
T	8.0	+0.6,-0.1
d	0.8	±0.05
	1.0	±0.05
L	28.0	Max.

### ELECTRICAL CHARACTERISTIC

Part Number	DC Breakdown Voltage	Maximum Impulse Breakdown Voltage		Maximum Impulse Discharge Current (8/20μs)		Alternating Discharge Current		Impulse Life (10/1000μs)	Minimum Insulation Resistance	Maximum Capacitance
		100V/μs	1000V/μs	1 time	10 times	50Hz 1sec	Single 9cycles			
		(V)	(V)	(KA)		(A)				
SGH81-600X	510~690	1000	1100	10	5	10	65	500	10	1.5
SGH81-800X	680~920	1100	1200	10	5	10	65	500	10	1.5
SGH81-102X	800~1200	1300	1400	10	5	10	65	300	10	1.5
SGH81-142X	1120~1680	2100	2200	5	2.5	2.5	5	10	10	1.5
SGH81-162X	1280~1920	2300	2400	5	2.5	2.5	5	10	10	1.5
SGH81-202X	1600~2400	2700	2800	5	2.5	2.5	5	10	10	1.5
SGH81-252X	2000~3000	3500	3600	5	2.5	2.5	5	10	10	1.5
SGH81-272X	2160~3240	3700	3800	5	2.5	2.5	5	300**	10	1.5
SGH81-302X	2400~3600	4100	4200	5	2.5	2.5	5	10	10	1.5

Note\* : DC Breakdown Voltage

◇ 600~1000V

◇ 1400~2500V

◇ 2700~3000V

Measuring Voltage

DC250V

DC500V

DC1000V

\*\*Measured with an 8/20μ waveform,100A

## Gas Discharge Tubes - SGH8 Series

### ELECTRICAL RATINGS

Item	Test Condition / Description	Requirement
DC Breakdown Voltage	The voltage is measured with a low rate of rise $dv / dt=100V/s$	To meet the specified value
Maximum Impulse Breakdown Voltage	The maximum impulse breakdown voltage is measured with a rise time of $dv / dt=1000V/\mu s$	
Maximum Impulse Discharge Current	<p>The maximum current within gas tube voltage charge of <math>\pm 20\%</math> when one impulse is applied. Applied waveform : 8/20<math>\mu</math> sec</p> <div style="text-align: center;"> </div>	
Maximum AC Discharge Current	<p>Rated rms value of AC current at 50Hz, 1sec. Requirements of intervals:3 min</p> <p style="margin-left: 40px;">2-electrode gas tube    9 discharges</p> <p style="margin-left: 40px;">3-electrode gas tube    10 discharges</p>	
DC Holdover Voltage	The maximum DC voltage across the two terminals of gas tube under which it may be expected to return to the high impedance state after the gas tube breakdown.	
Insulation Resistance	<p>The resistance of gas tube shall be measured each terminal each other terminal. Applied voltage: gas tube DC breakdown voltage under 150V, the test voltage is 50V DC; with all after types at 100V DC.</p>	
Capacitance	<p>The capacitance of gas tube shall be measured each terminal to each other terminal. Test frequency :1KHz</p> <p>In measurements involving 3-electrode gas tubes, the terminal not being tested shall be connected to a ground plane.</p>	